

To: Ohlhausen, Natalie[Natalie.Ohlhausen@anadarko.com]
From: Smith, Claudia
Sent: Fri 2/9/2018 8:45:04 PM
Subject: RE: Questions on Remaining MNSR U&O Reservation Compressor Station Permit Applications

Thank you, Natalie!

Claudia Young Smith

Environmental Scientist

Air Program

U.S. Environmental Protection Agency, Region 8

Tel: (303) 312-6520

Email: smith.claudia@epa.gov

Web: <http://www.epa.gov/caa-permitting/caa-permitting-epas-mountains-and-plains-region>

Mail: 1595 Wynkoop Street, Mail Code 8P-AR, Denver, Colorado 80202

From: Ohlhausen, Natalie [mailto:Natalie.Ohlhausen@anadarko.com]
Sent: Friday, February 9, 2018 1:44 PM
To: Smith, Claudia <Smith.Claudia@epa.gov>
Subject: RE: Questions on Remaining MNSR U&O Reservation Compressor Station Permit Applications

Claudia,

Please see responses in blue. Let me know if you have any additional questions.

Thank you,

Natalie Ohlhausen

Direct: 720-929-6498

Mobile: 281-785-8929

From: Smith, Claudia [<mailto:Smith.Claudia@epa.gov>]

Sent: Thursday, January 25, 2018 12:09 PM

To: Ohlhausen, Natalie <Natalie.Ohlhausen@anadarko.com>

Subject: Questions on Remaining MNSR U&O Reservation Compressor Station Permit Applications

Hi Natalie,

I have reviewed the permit applications for the remaining 8 compressor station MNSR permits on the U&O Reservation and have a few questions. It would be great to get these sometime next week if possible, but no later than Friday, February 16th. Once I have this information, I can finish drafting the proposed permits and start preparing for public notice. I can be reached via email or at 303-312-6520 with any questions. Thanks. -Claudia

Diablo Compressor Station

- Appendix D of your application does not propose any VOC requirements for the 2 low-emission dehydrators at the facility. I assume you want the permit to include the enforceable restrictions for the dehydrators (similar to the permits currently out for public comment and the CD). Please verify. Yes, there are two low emission dehydration units at this station and we will need the same language as was in the Bitter Creek Permit.
- Please provide the MMscfd capacity for each of the dehydrators. The application did not include the emissions unit detail sheets for the two dehydrators. 50 MMSCFD. Data sheets are attached.
- Please provide the capacity of the condensate/produced water tank storage. The tank size is not in the application. 400bbl tank capacity

- Additionally, the process description states that condensate is sent to the blowcase system and injected into the discharge line, but also states condensate is stored in the produced water tank. Also, the application states that Liquids are held in storage tanks (plural) onsite until loaded into trucks for transport to sale, but additional storage tanks are not listed in the equipment list. The process flow diagram for the facility indicates only 1 produced water tank. Can you clarify the liquids storage operations at the facility?

Liquids storage at the facility is handled via a single 400bbl produced water storage tank. Diablo does not have a blowcase system, that detail must have been erroneously copied over from another application.

- Appendix D appears to be requesting recordkeeping requirements for the condensate/produced water storage tank to demonstrate compliance with the VOC requirements of the permit, but no VOC emissions limits are requested for the storage tank. Is the recordkeeping requirement intended to apply to the facility in general and compliance with all of the requested limitations? Please clarify. The request for recordkeeping requirements in Appendix D appear to have been copied from another application. This permit application was not intended to request VOC emission limits for the Diablo storage tank.

Blue Feather Compressor Station

- Please provide the capacity of the 2 condensate/produced water tanks. The tank size is not in the application. Each tank has a 400bbl capacity.
- Additionally, the process description states that condensate is sent to the blowcase system and injected into the discharge line, but also states it is stored in the produced water tanks. Please clarify this discrepancy.

The blowcase system is used to collect liquids off of the inlet slug catcher. Liquids from compression are collected in the storage tanks.

- Appendix D appears to be requesting recordkeeping requirements for the condensate/produced water storage tanks to demonstrate compliance with the VOC requirements of the permit, but no VOC emissions limits are requested for the storage tanks. Is the recordkeeping requirement intended to apply to the facility in general and compliance with all of the requested limitations? Please clarify. The request for recordkeeping requirements in Appendix D appear to have been copied from another application. This permit application was not intended to request VOC emission limits for the Blue Feather storage tanks.

East Junior Compressor Station

- Please provide the capacity of the 2 condensate/produced water tanks. The tank size is not in the application. Each tank has a 400bbl capacity.

- Additionally, the process description states that condensate is sent to the blowcase system and injected into the discharge line, but also states it is stored in the produced water tanks. Please clarify this discrepancy. The East Junior Station does not have a blowcase system.

- Appendix D appears to be requesting recordkeeping requirements for the condensate/produced water storage tanks to demonstrate compliance with the VOC requirements of the permit, but no VOC emissions limits are requested for the storage tanks. Is the recordkeeping requirement intended to apply to the facility in general and compliance with all of the requested limitations? Please clarify. The request for recordkeeping requirements in Appendix D appear to have been copied from another application. This permit application was not intended to request VOC emission limits for the East Junior storage tanks.

L-16 Compressor Station

- The process description states that condensate is sent to the blowcase system and injected into the discharge line, but also states it is stored in the produced water tanks. Please clarify this discrepancy. The blowcase system is used to collect liquids off of the inlet slug catcher. Liquids from compression are collected in the storage tanks.

- Appendix D appears to be requesting recordkeeping requirements for the condensate/produced water storage tanks to demonstrate compliance with the VOC requirements of the permit, but no VOC emissions limits are requested for the storage tanks. Is the recordkeeping requirement intended to apply to the facility in general and compliance with all of the requested limitations? Please clarify. The request for recordkeeping requirements in Appendix D appear to have been copied from another application. This permit application was not intended to request VOC emission limits for the L-16 storage tank.

North East State Compressor Station

- Please provide the capacity of the 2 condensate/produced water tanks. The tank size is not in the application. Each tank has a 400bbl capacity.

- Appendix D appears to be requesting recordkeeping requirements for the condensate/produced water tanks to demonstrate compliance with the VOC requirements of the permit, but no VOC emissions limits are requested for the storage tanks. Is the recordkeeping requirement intended to apply to the facility in general and compliance with all of the requested limitations? Please clarify. The request for recordkeeping requirements in Appendix D appear to have been copied from another application. This permit application was not intended to request VOC emission limits for the North East storage tanks.

-

Morgan State Compressor Station

- The process description states that condensate is sent to the blowcase system and injected into the discharge line, but also states it is stored in the produced water tanks. Please clarify this discrepancy. The Morgan State Station does not have a blowcase system.
- Please provide the capacity of the 2 condensate/produced water tanks. The tank size is not in the application. Each tank has a 400bbl capacity.

•□□□□□□□ The application indicates there is a H2S air stripper at the facility. Please send me a sentence or two about how this unit fits in to the facility operations that I can include in the process description. Please verify that there are no emissions associated with this unit (nothing in PTE tables). Would this be the same answer you provided to Eric Wortman for the Archie Bench Compressor Station a while back? Morgan State compressor station has a gas to liquid H2S scrubber. The scrubber consists of a vertical vessel where gas is introduced to a H2S scavenger liquid that removes H2S from the gas stream prior to it being sent to the gas plant. There is no PTE associated with these scrubbers.

•□□□□□□□ Appendix D appears to be requesting recordkeeping requirements for the condensate/produced water tanks to demonstrate compliance with the VOC requirements of the permit, but no VOC emissions limits are requested for the storage tanks. Is the recordkeeping requirement intended to apply to the facility in general and compliance with all of the requested limitations? Please clarify. The request for recordkeeping requirements in Appendix D appear to have been copied from another application. This permit application was not intended to request VOC emission limits for the Morgan State storage tanks.

Willow Creek Compressor Station

•□□□□□□□ Appendix D of your application does not propose any VOC requirements for the 2 low-emission dehydrators at the facility. I assume you want the permit to include the enforceable restrictions for the dehydrators (similar to the permits currently out for public comment and the CD). Please verify. We are requesting limits for the dehyds similar to what was included in the Bitter Creek permit.

•□□□□□□□ Please provide the MMscfd capacity for each of the dehydrators. The application did not include the emissions unit detail sheets for the two dehydrators. Each dehy has a capacity of 50MMSF/d

•□□□□□□□ Please provide the capacity of the condensate/produced water storage tanks. The tank size is not in the application. Each tank has a 400bbl capacity.

•□□□□□□□ Additionally, the process description states that condensate is sent to the blowcase system and injected into the discharge line, but also states condensate is stored in the produced water tanks. Please clarify this discrepancy. Willow Creek Station does not have a blowcase system, that detail must have been erroneously copied over from another application.

•□□□□□□□ Appendix D appears to be requesting recordkeeping requirements for the condensate/produced water tanks to demonstrate compliance with the VOC requirements of the permit, but no VOC emissions limits are requested for the storage tanks. Is the recordkeeping requirement intended to apply to the facility in general and compliance with all of the requested limitations? Please clarify. The request for recordkeeping requirements in Appendix D appear to have been copied from another application. This permit application was not intended to request VOC emission limits for the Willow Creek storage tanks.

•□□□□□□□ The process flow diagram indicates there are 5 H₂S scrubbers at the facility, but they are not mentioned in the equipment list or the process description. Please send me a sentence or two about how these units fit in to the facility operations that I can include in the process description. Please verify that there are no emissions associated with these units (nothing in PTE tables). Willow Creek compressor station has five gas to liquid H₂S scrubbers. Each scrubber consists of a vertical vessel where gas is introduced to a H₂S scavenger liquid that removes H₂S from the gas stream prior to it being sent to the a gas plant. There is no PTE associated with these scrubbers.

Bonanza West Compressor Station

•□□□□□□□ Please provide the capacity of the 3 condensate/produced water tanks. The tank size is not in the application. Bonanza West has one 400bbl tank and two 300bbl tanks.

•□□□□□□□ Additionally, the process description states that condensate is sent to the blowcase system and injected into the discharge line, but also states it is stored in the produced water tanks. Please clarify this discrepancy. The Bonanza West Station does not have a blowcase system.

•□□□□□□□ Appendix D appears to be requesting recordkeeping requirements for the condensate/produced water tanks to demonstrate compliance with the VOC requirements of the permit, but no VOC emissions limits are requested for the storage tanks. Is the recordkeeping requirement intended to apply to the facility in general and compliance with all of the requested limitations? Please clarify. The request for recordkeeping requirements in Appendix D appear to have been copied from another application. This permit application was not intended to request VOC emission limits for the Bonanza West storage tanks.

•□□□□□□□ The plot plan indicates there are 2 H₂S air strippers at the facility, but they are not listed in the equipment list. Please send me a sentence or two about how these units fits in to the facility operations that I can include in the process description. Please verify that there are no emissions associated with these units (nothing in PTE tables). Would this be the same answer you provided to Eric Wortman for the Archie Bench Compressor Station a while back? Bonanza West compressor station has two gas to liquid H₂S scrubbers. Each scrubber consists of a vertical vessel where gas is introduced to a H₂S scavenger liquid that removes H₂S from the gas stream prior to it being sent to the a gas plant. There is no PTE associated with these scrubbers.

Claudia Young Smith

Environmental Scientist

Air Program

U.S. Environmental Protection Agency, Region 8

Tel: (303) 312-6520

Email: smith.claudia@epa.gov

Web: <http://www.epa.gov/caa-permitting/caa-permitting-epas-mountains-and-plains-region>

Mail: 1595 Wynkoop Street, Mail Code 8P-AR, Denver, Colorado 80202

[Click here for Anadarko's Electronic Mail Disclaimer](#)